

point to the University Colleges, so far, at all events, as regards honours in arts and science.

We are informed by a legal correspondent that a strong Committee has been formed at Lincoln's Inn to promote reforms in legal education. We trust this may prove the first step to the constitution, on the teaching side of the University, with the co-operation of the Inns of Court, of a real Legal Faculty, on a basis similar to that above recommended for medicine. To separate the professional Faculties from the academical, in a University of the nineteenth century, savours of anachronism.

RECENT ORNITHOLOGICAL WORKS.

Classification of Birds; an Attempt to diagnose the Sub-classes, Orders, Sub-orders, and some of the Families of Existing Birds. By Henry Seebohm. Pp. i-xi., 1-53. (London: R. H. Porter, 1890.)

A Hand-book of European Birds, for the use of Field Naturalists and Collectors. By James Backhouse, Junr. Pp. i-viii., 1-334. (London: Gurney and Jackson, 1890.)

THE most important ornithological work which has recently appeared is undoubtedly Mr. Henry Seebohm's "Classification of Birds." Any attempt to arrange the class "Aves" is always warmly welcomed by ornithologists; and whether they agree or not with all Mr. Seebohm's conclusions, they have every reason to be grateful to him for an honest effort to diagnose the existing orders of birds. It has been known to most of us that Mr. Seebohm has been engaged, with his usual energy, in a close study of avian osteology for the last two years, and the present "Classification" is the result of his original studies, combined with a careful digest of the work of his predecessors in the same field—Parker, Fürbringer, Garrod, Forbes, and others.

The author starts with a high purpose, and with a resolve that diagnoses shall be found which shall hold good for each group of birds, and that the combination of characters set forth shall be diagnostic of that group, and of that group alone. No one, therefore, can grumble at the arrangement, because the order can be altered at will, each order and sub-order possessing their absolutely special characters. Two schemes for the higher classification of birds are proposed. In the first one the author recognizes six sub-classes, as follows:—I. Passeriformes; II. Falconiformes; III. Coraciiformes; IV. Anseriformes; V. Galliformes; and VI. Struthioniformes.

In his "Alternative Scheme" he reduces the number of sub-classes into *five*, by merging the Falconiformes, the Anseriformes, and the Galliformes into the sub-classes Ciconiiformes and Galliformes, the latter taking in the Lamellirotres of the first classification, and sending in return the Tubinares and Impennes back to the Ciconiiformes.

The condition of the young at birth forms the groundwork of this second method of classification, which the author approves, but the subject is treated in a method different from that of Sundevall, who also thought highly of the condition of the nestling bird as an element of primary classification, but, according to Mr. Seebohm, he attached an exaggerated importance to some of the facts. That the character of the nestling is bound to play a significant

part in the classification of birds we can well understand, but at present the various developments of the downy young are, we believe, but imperfectly understood. Thus we may remark that in the Passeriformes we know at least two exceptions to their diagnosis as given by Mr. Seebohm, viz. in the Shore Lark (*Otocorys alpestris*), and in a curious bird from Ecuador, *Ptilochloris buckleyi*, belonging to the family *Pipridæ*. Other examples will doubtless be found, and yet closer examination will probably demonstrate that the downy stage through which these Passerine birds pass will be of a different fundamental character from the downy stages of other birds.

There can be but little doubt that of the two schemes provided by Mr. Seebohm the second one is the best, but a stumbling-block at first sight appears to be the position of the *Columbæ* in the Passeriformes, and that of the *Cathartes* (*lege* Cathartides) in the Coraciiformes with the Kingfishers and Hornbills. It is perhaps the novelty of these allocations that causes our hesitation in accepting them, for after all a Turkey Vulture and a Ground Hornbill (*Bucorax*) have considerable resemblance. In any case Mr. Seebohm gives characters for the diagnosis of all his Orders and Sub-orders, and their linear arrangement can be shifted at will. Each order and sub-order is not only defined, but a table accompanies every one of them, showing the whole of the thirty-six minor divisions, exhibiting by an asterisk the want of any specified character, and so narrowing the issue of definition in each instance. The author is greatly to be congratulated on the result of his two years' labour, which will doubtless be the stepping-stone to further treatises on the classification of birds.

We cannot congratulate Mr. James Backhouse on his "Hand-book of European Birds." The author's intention doubtless is good, but though "many of the finest bird collections in the Kingdom have been carefully examined, and the best modern authorities have been consulted," the result of all this compilation is not satisfactory, and a want of practical acquaintance with the manner in which a "Hand-book" should be written is apparent at every step. We fear that the outline figure of a bird, drawn by Mr. R. E. Holding, in order to show the nomenclature of the different parts of a bird, will not commend itself to any experienced field naturalist or collector, who will probably know more of his subject than did the artist who perpetrated this figure. We will do no more than point out that the "cervix" is called the "hind neck" by most ornithological writers, that the "malar region" is generally spoken of as "the cheeks," that the positions of the "breast," "abdomen," and "anal region" are all placed wrongly in the figure, and that the "crissum" is not the same as the "lower tail-coverts." The divisions of the back are also wrongly defined. Luckily, the author himself does not recognize the terminology of his own "bird-map," or the confusion of parts would have been disastrous.

We had fondly hoped that, having started the "Birds of Europe" in 1871 (since completed by Mr. Dresser), with the idea that a work of that character should include all the species of the Western Palearctic region, which is at least a natural division of the globe, it would not

occur to future authors to return to the old idea of treating the avifauna of Europe on political ideas, and fencing in the ranges of the birds with political boundaries. Yet it is on these old lines that Mr. Backhouse has written his "Hand-book," and he must be held responsible for a very retrograde step. From his preface, with the short definition of the six zoogeographical divisions of the earth, one would expect to find that he recognized the value of writing on the birds of a well-defined zoological area, but a glance at the countries which he assigns to the Ethiopian and African regions shows that he does not really understand the subject of geographical regions, for, after stating that the Western Palearctic sub-region includes the countries *west* of the Jordan, he apparently wishes us to believe that Palestine *east* of the Jordan belongs to the Eastern Palearctic sub-region, while Asia Minor is to remain in the western part. We should like to know where the regional differences between Asia Minor and Persia, and, for that matter, Palestine and Syria, begin and end. Arabia seems to be left out in the cold, finding a place neither in the Palearctic nor in the Ethiopian regions, while the Indian region includes Asia south of the Himalayas with the Indo-Malayan Islands and Formosa, as well as *Madagascar*! With such crude notions as to the limits of the regions which adjoin the Palearctic, it is not to be wondered at that Mr. Backhouse's ideas of the natural limits of the latter are also ill defined. The mischievous results of these notions of the limits of "Europe" are seen in the appendices of North American birds which are "*stated*" to have occurred in Europe. Many of the birds mentioned in his list have undoubtedly occurred more than once, and the incompleteness of the plan of the work is shown by their omission from the body of it, because these species may occur again at any time to the "field naturalist" or "collector," for whom the author specially caters, and these will look in vain for them in this "Hand-book." The same with the list of Asiatic and African species which are *stated* to have occurred in Europe. Many of them *have* occurred in Europe, beyond the shadow of a doubt, and *Certhilauda duponti* (of *C. lusitanica* the author apparently knows nothing), *Sturnus purpurascens*, and *Falco minor*, have as much right to be considered European birds (even in Mr. Backhouse's acceptance of the term), as *Picus lilfordi* or *Cypselus pallidus* (whose range is *not* "probably similar to that of *C. apus*," or anything like it).

The main idea running through Mr. Backhouse's "Hand-book" seems to be the same as was exemplified in Colonel Irby's "Key List to British Birds," but we greatly prefer the plan of the latter pamphlet for its method of execution to the more ambitious work of Mr. Backhouse, wherein most of the mistakes of Dresser's "Birds of Europe" are reproduced, even to the omission of the Astrachan Horned Lark (*Otocorys brandti*)! Besides the faults we have noted, all of which are easily capable of rectification in a future edition, there is one cardinal defect in this "Hand-book," and that is in the assumption that the "field-naturalist" and "collector," for whom the author writes, is minutely acquainted with Palearctic *genera*, and will know instinctively whether he has a *Hypolais*, an *Acrocephalus*, or a *Luscinola* in his hands.

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CRIMINAL ANTHROPOLOGY.

The Criminal. By Havelock Ellis. Illustrated. (London : W. Scott, 1890.)

CRIMINAL anthropology has of late years attracted much attention abroad, where its problems have been largely and often very loosely discussed. Mr. Havelock Ellis performs the useful task of making English readers acquainted with the results. It cannot be said that much progress has been made on the psychological side of the subject since the publication of Despine's "Psychologie" in 1868, but the main conclusions of that author have been abundantly confirmed. On the physical side, numerous dissections and measurements seem to have led to no well established and important fact; they have, however, narrowed the limits within which speculation may legitimately ramble. It is well ascertained that many persons are born with such natures that they are almost certain to become criminals. The instincts of most children are those of primæval man; in many respects thoroughly savage, and such as would deliver an adult very quickly into the hands of the law. The natural criminal retains those same characteristics in his adult life. The author has a very true but not complimentary passage upon the ways of children. He says that the child lives in the present, the desire of the moment blotting out everything else from his mind. That he has no foresight to restrain him from acting according to impulse. That he is a thorough egoist, and will commit any enormity to obtain what he wants. That he is cruel and enjoys the manifestations of pain. That he is a thief for the gratification of his appetites, chiefly of gluttony; and that he is an unscrupulous and often cunning liar, not hesitating to put the blame on innocent persons when his own misdeeds are discovered. In the large majority of our countrymen the savagedom of childhood becomes gradually in part repressed, in part outgrown, and in part transformed. Discipline is one agent, another is the larger growth of sympathetic feelings, and another is the education of a habit of forethought, which prompts selfishness to be wise, and induces many persons to assume throughout life the appearance of virtues for which they have no care, solely through the fear of social or legal punishment. We may freely allow that everybody is liable under some circumstances to fall into crime, for, in the words of the liturgy, "we are set in the midst of so many and great dangers that by reason of the frailty of our nature we cannot always stand upright," but the difference between ordinary persons and natural criminals is that the latter are unable to stand upright even under favourable conditions. There are numerous human beings who have an instinctive aptitude to various forms of ill-doing, no sense of remorse for the sufferings they may have caused, and who possess too little forethought and self-restraint for the fear of retribution to become effective. Abundant evidence of all this is to be found in Mr. Ellis's book, and there seems to be a consensus among experts as to its trustworthiness.

It is easy to understand that ordinary men who are thrown among criminal associates will soon acquire their furtive expression and other peculiarities of demeanour; but after making all allowance for these acquired characteristics there remain certain natural ones that